Application No.: 10/623,653 Attorney Docket No. 0465-1040P Amendment filed January 3, 2005

Page 2

Amendments to the Claims

1-18. (Canceled).

Art Unit 2655

19. (New) A method for detecting a non-writable region of an optical

recording medium including a plurality of non-writable regions of different

phases having information for controlling a writable data region between the

writable data regions, the method comprising the steps of:

(1) detecting a sum of optical signals reflected at the optical recording

medium;

(2) comparing the summed signal to a reference value; and

(3) determining if a current position is a writable region or a non-writable

region based on the result of the comparison.

20. (New) The method as claimed in claim 19, wherein step (3)

determines that the current position is a non-writable region if the summed

signal is higher than the reference value.

21. (New) The method as claimed in claim 19, wherein the non-writable

region is a header region.

22. (New) The method as claimed in claim 19, wherein step (1) includes a

Application No.: 10/623,653 Attorney Docket No. 0465-1040P Art Unit 2655 Amendment filed January 3, 2005

Page 3

step of obtaining at least a bottom hold signal from the summed signal.

23. (New) The method as claimed in claim 22, wherein step (3) determines the present region as an unwritten region if the bottom held value is greater than a reference value, and as a written region if the bottom held value is smaller than the reference value.

24. (New) The method as claimed in claim 19, further comprising holding a servo error signal for carrying out a servo control to read or write data if the current position is determined as a non-writable region.

25. (New) The method as claimed in claim 19, further comprising:

counting a number of the determined non-writable regions, to determine the present track of being a land track or a groove track, and

performing a land/groove switching operation depending on a result of the determination.

26. (New) A method for detecting a non-writable region of an optical recording medium including a plurality of non-writable regions of different phases having information for controlling a writable data region between the writable data regions, the method comprising the steps of:

Application No.: 10/623,653 Attorney Docket No. 0465-1040P Art Unit 2655 Amendment filed January 3, 2005

Page 4

(1) detecting a read channel 2 signal being an added signal of optical

signals reflected at the optical recording medium;

(2) comparing the read channel 2 signal to a reference value; and

(3) discriminating a writable region or a non-writable region based on a

result of the comparison.

27. (New) The method as claimed in claim 26, wherein step (1) includes a

step of detecting a read channel 1 signal being a difference signal of optical

signals reflected from the optical recording medium.

28. (New) The method as claimed in claim 27, wherein step (2) compares

the detected signal with a reference value, thereby to determine a region as the

non-writable region based on a result of the comparison.

29. (New) A method for detecting a non-writable region of an optical

recording medium, the method comprising the steps of:

(1) detecting a read channel 1 signal being a difference of optical signals

reflected from the optical recording medium, the optical recording medium

includes a plurality of non-writable regions of different phases having

information for controlling a writable data region between the writable data

regions;

Application No.: 10/623,653 Attorney Docket No. 0465-1040P Art Unit 2655 Amendment filed January 3, 2005

Page 5

(2) comparing the detected signal with a reference value; and

(3) determining a region as the non-writable region or the writable region

based on a result of the comparison.

30. (New) The method as claimed in claim 29, wherein step (1) includes a

step of detecting a read channel 2 signal being a summation of optical signals

reflected from the optical recording medium.

31. (New) The method as claimed in claim 30, wherein step (2) compares

the detected signal with a reference value, thereby to determine a region as the

non-writable region based on a result of the comparison.

32. (New) The method as claimed in claim 29, further comprising:

(4) holding a servo error signal for a servo control if a point of the optical

recording medium being written or read at the present time is determined to be

a non-writable region.

33. (New) The method as claimed in claim 29, further comprising:

(4) counting a number of the determined non-writable regions, to

determine the present track of being a land track or a groove track, and

(5) performing a land/groove switching operation depending on a result

Application No.: 10/623,653 Attorney Docket No. 0465-1040P Art Unit 2655 Amendment filed January 3, 2005

Page 6

of the determination.

34. (New) The method as claimed in claim 29, wherein step (1) includes a

step of obtaining at least a bottom hold signal from the summed signal.

35. (New) The method as claimed in claim 34, wherein step (3)

determines the present region as the non-writable region or the writable region

as comparing the bottom held value with the reference value.

36. (New) The method as claimed in claim 35, wherein step (3)

determines the present region as the non-writable region if the bottom held

value is greater than the reference value, and as the writable region if the

bottom held value is smaller than the reference value.

37. (New) A method for detecting a non-writable region of an optical

recording medium, the method comprising the steps of:

detecting a non-writable region of an optical recording medium, by

comparing a read channel 1 or a read channel 2 signal with a reference value,

the read channel 2 signal being a difference of optical signals reflected from the

optical recording medium, and the read channel 1 signal being a summation of

optical signals reflected from the optical recording medium; and

Application No.: 10/623,653

Art Unit 2655

Attorney Docket No. 0465-1040P Amendment filed January 3, 2005

Page 7

controlling a read or write operation based on the result of the detection

step.

38. (New) The method as claimed in claim 37, further comprising the step

of changing the reference value be to compared with a read channel 1 or a read

channel 2 signal, thereby to detect a non-writable region of an optical recording

medium.

39. (New) The method as claimed in claim 38, further comprising the step

of determining a region as the non-writable region if a low pass filtered value is

greater than the changed reference value.